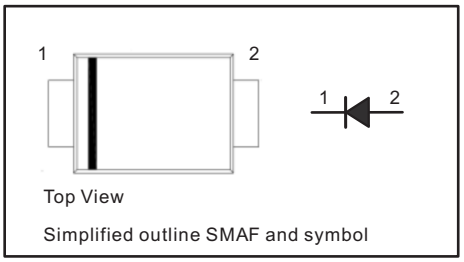
## 2.0Amp Standard Surface Mounted Rectifiers

### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 260℃/10 seconds at terminals

**PINNING**

| PIN | DESCRIPTION |
|---|---|
| 1 | Cathode |
| 2 | Anode |



Top View

Simplified outline SMAF and symbol

### Mechanical Data

**Case** : Molded plastic body
**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026
**Polarity** : Polarity symbol marking on body
**Mounting Position** : Any
**Weight** : 0.0014 ounce, 0.038 grams



Product Name,X : A.B.....M

### Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

| Parameter | Symbols | S2AF | S2BF | S2DF | S2GF | S2JF | S2KF | S2MF | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at $T_L$=100℃ | $I_{(AV)}$ | 2.0 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 50.0 | | | | | | | A |
| Maximum instantaneous forward voltage at 2.0A | $V_F$ | 1.0 | | | | | | | V |
| Maximum DC reverse current $T_A$ =25℃<br>at rated DC blocking voltage $T_A$=125℃ | $I_R$ | 2.0<br>200 | | | | | | | uA |
| Typical junction capacitance (Note1) | $C_J$ | 30.0 | | | | | | | pF |
| Typical thermal resistance | $R_{qJA}$ | 70.0 | | | | | | | °C/W |
| Operating junction and storage temperature range | $T_J$,$T_{STG}$ | -55 to +150 | | | | | | | °C |

**Note:** 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

## 2.0Amp Standard Surface Mounted Rectifiers

### Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

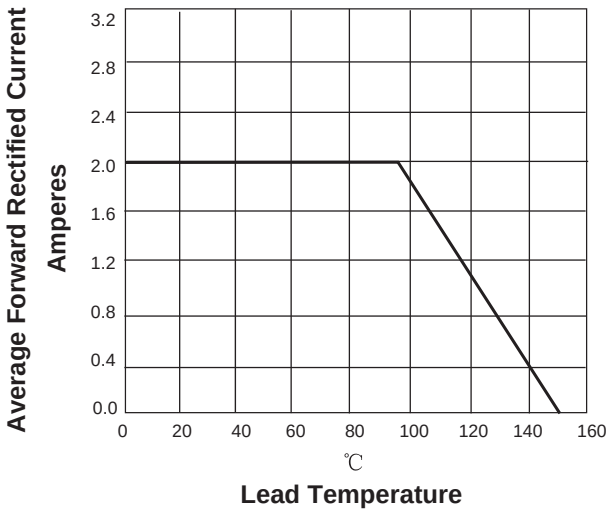



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

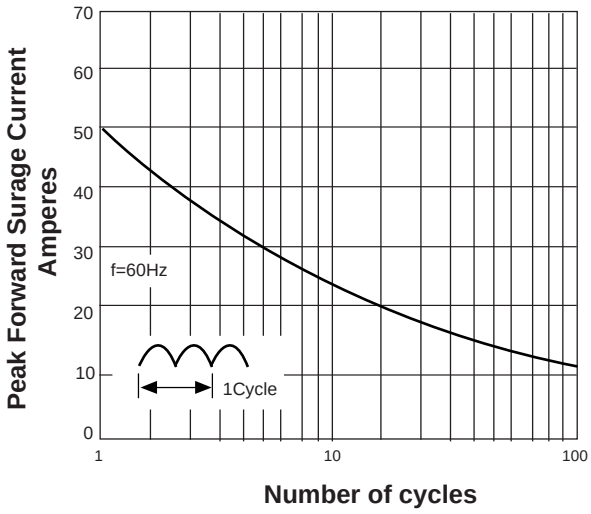



FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

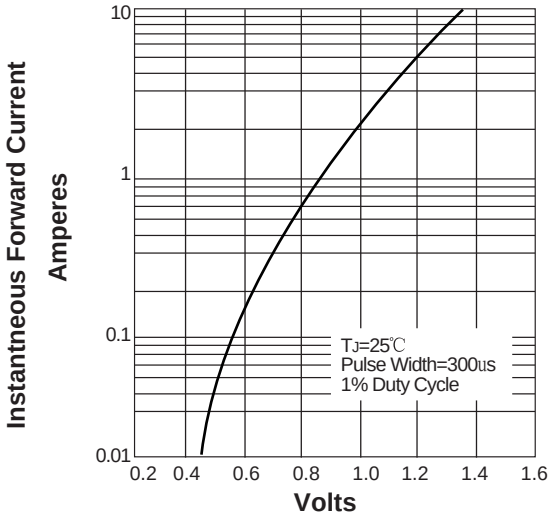
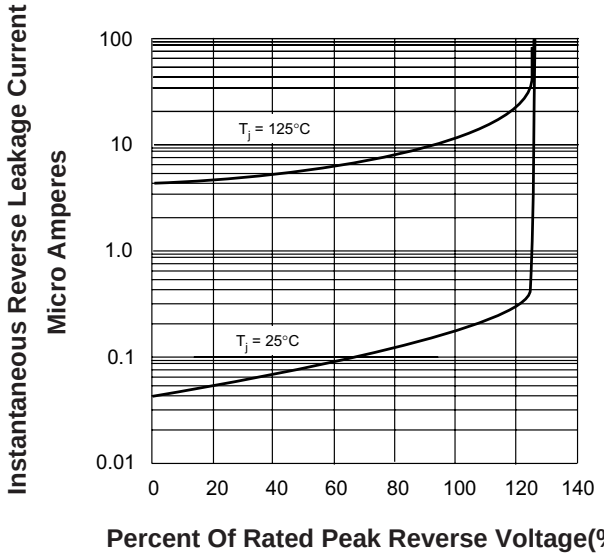


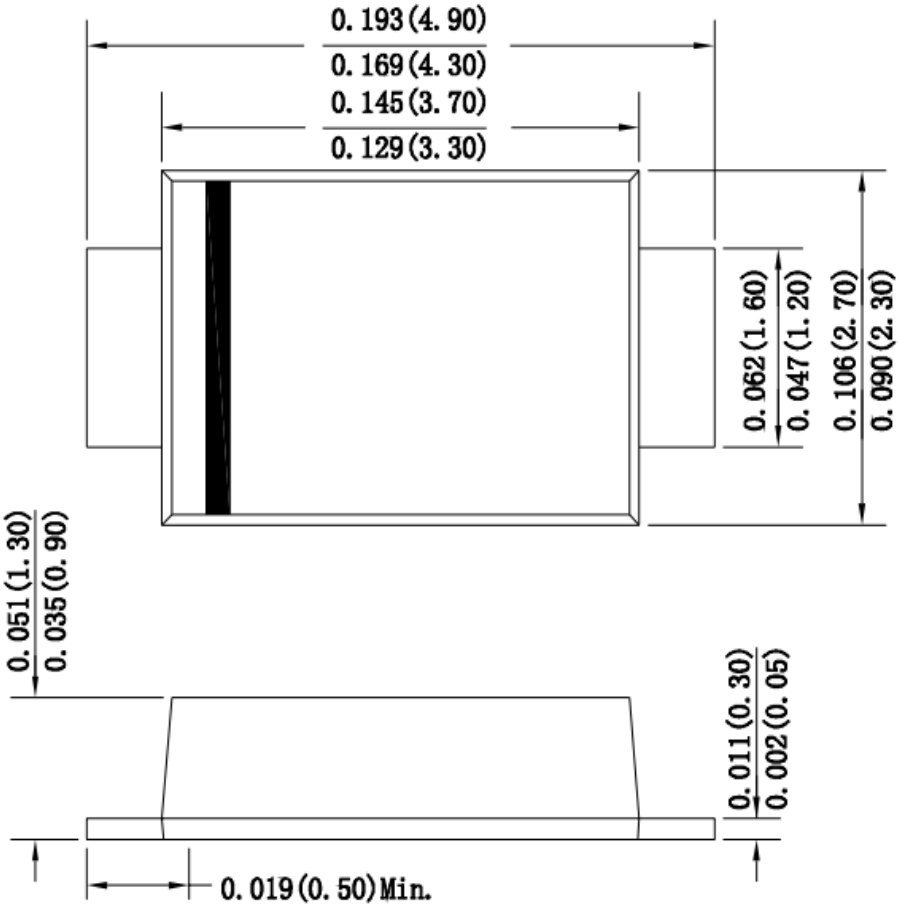

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



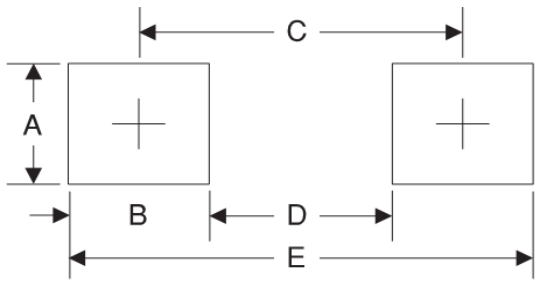
**2.0Amp Standard Surface Mounted Rectifiers**

Dimensions in inches and (millimeters)

## SMAF



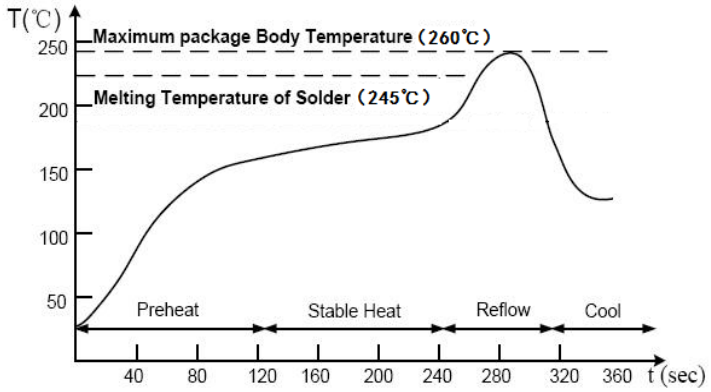

**Suggested Pad Layout**




| Symbol | Unit (mm) | Unit (inch) |
|---|---|---|
| A | 1.68 | 0.066 |
| B | 1.52 | 0.060 |
| C | 3.90 | 0.154 |
| D | 2.00 | 0.078 |
| E | 5.10 | 0.200 |

## 2.0Amp Standard Surface Mounted Rectifiers

### Suggested Soldering Temperature Profile

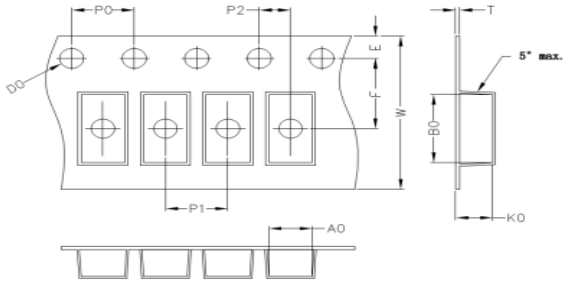



**Note**

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 260°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

## Package Information

### Carrier Dimension(mm)




| A0 | B0 | K0 | D0 | E | F |
|---|---|---|---|---|---|
| 2.83 | 4.75 | 1.42 | 1.55 | 1.75 | 5.50 |
| **P0** | **P1** | **P2** | **T** | **W** | **Tolerance** |
| 4.0 | 4.0 | 2.0 | 0.25 | 12 | 0.1 |

### Package Specifications

| Package | Reel Size | Reel DIA. (mm) | Q'TY/Reel (Kpcs) | Box Size (mm) | QTY/Box (Kpcs) | Carton Size (mm) | Q'TY/Carton (Kpcs) |
|---|---|---|---|---|---|---|---|
| SMAF | 7' | 178 | 3 | 180 | 12 | 380*200*200 | 120 |
| | 11' | 278 | 7.5 | 285 | 15 | 355*310*310 | 120 |